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A COURSE OF CLINICAL LECTURES,

Delivered at the Hôtel Dieu, Paris, for the Session 1842–'43.

BY A. F. CHOMEL, M. D.

LECTURE XIV.

RESUMÉ OF THE ANNUAL CLINIC.

(Concluded.)

DISEASES OF THE HEART.

The affections of the heart have been very numerous this year; there have been forty-one cases, out of which sixteen died. Out of these forty-one cases sixteen were men, and twenty-four women. This proportion of women, even taking into consideration the greater number of beds in the women's wards, is so great as to indicate some particular cause exercising its influence over the women. It is probable that this influence may be partially referred to their extreme sensibility, and to the acute and powerful manner in which they are affected by moral emotions. In eleven cases we observed symptoms of simple hypertrophy, six out of these eleven died. Autopsy in these six cases, revealed in some, an insufficiency of the valves, in the others there was no appreciable lesion of the heart. In sixteen cases during life we were able to detect symptoms of insufficiency of the valves; in four cases we ascertained symptoms of left auriculo-ventricular contraction, and in three cases a contraction and insufficiency of auriculo-ventricular.

Out of the total number of these affections twenty-nine times the lesions were observed on the left side. These results are confirmed daily by necroscopical observations, which prove that the material lesions are much more frequently found in the left side of the heart than in the right. Five patients died with all the symptoms of insufficiency of the valves. We had observed during their life time at the first sound of the heart, a blowing sound, which lasted for some moments. It is difficult in autopsies to detect insufficiency of the mitral valve. We can discover with facility the insufficiency of the sigmoid valves, by means of a jet of water poured into the aortic orifice, and which, in mechanically distending the valves, enables us to detect their insufficiency, but this experiment cannot be made in the case of the mitral valve.

In two cases of auriculo-ventricular contraction, a blowing sound could be heard commencing with the first sound of the heart, and finishing after it. Autopsy confirmed our diagnosis. In two other cases of auriculo-ventricular contraction, together with insufficiency, the blowing sound commenced before the first sound of the heart, and finished with the second sound. Finally, in one case where we heard the blowing sound at the first sound of the heart, near its apex, we diagnosticated an insufficiency of the sigmoid valves; but this diagnosis was not confirmed by autopsy, which seemed contrary to all known results. In six cases there were anormal sounds and irregularity in the pulse. When this irregularity in the pulse continues, it appears to us to indicate that there is an alteration in the valves of the heart or that it is about taking place. We have already referred to the relation which may exist between the lesions of the heart and rheumatic affections, we will only add a few words to what has been said on this subject.

Out of thirty-four cases of articular rheumatism, there have been fourteen complicated with an anormal condition of the heart. These complications of a morbid state of the heart, terminate often very happily; nevertheless, we generally hear a grating sound more or less sharp. This anormal sound does not then always indicate an organic lesion of the heart, but merely sometimes a transient morbid state, probably owing to a nervous disturbance of this organ. The observations which have been relied upon by those who have established a theory on this coincidence of morbid phenomena are, in our opinion, neither sufficiently numerous nor sufficiently clear; we must continue to observe our patients very attentively, and to interrogate them very carefully upon the prodromes. It is not difficult to discover whether this complication of took place at the same time as the rheumatism; or whether any palpitations preceded or followed the rheumatic pains.

With regard to inflammation of the pericardium, we had two fatal cases, one of which presented a complication of rheumatism, the other of typhoid fever. We can draw no conclusion from these results.

As to endo-carditis, it is a very rare disease, whatever may be said of it. We have had some cases of it, within the last few years; we observed a well-marked case of it within the last year; another presented itself in the practice of M. Grisolle whilst he was at the head of our clinic. A third case has been cited by M. Guenau de Mussy; the pathological specimens of the last case, which afforded a great deal of interest, have been deposited in the Dupuytren Museum.

The case cited by M. Grisolles, was that of a woman of a good constitution, although slightly inclined to a lymphatic temperament; she entered the hospital with all the symptoms of an internal phlegmasia of the heart; she was treated in large and frequent bleedings; but, notwithstanding these energetic means, she succumbed. The observations in M. Guenau de Mussy's case referred to a woman of a nervo-sanguineous temperament; she suffered from very acute deep seated pains in the region of the heart; she had never had rheumatism. We employed a very energetic treatment, but were unable to save her. The patient whose case we met with last year, and who had endo-carditis, had not suffered from rheumatism. We are obliged therefore to admit that endo-carditis is not always, nor as often as it is said to be, the result of acute rheumatism, and that it can take place without being complicated with the latter affection. We have already expressed our opinion upon the organic affections of the

heart, which are considered as consequent upon rheumatism. This question, in our opinion, is far from being satisfactorily decided. In reference to this matter the following is the result of our experience as to the proportion and relation of these affections.

In five cases rheumatism preceded, twice it followed, one case was doubtful. In the thirty-three cases remaining, of which there were eleven of simple hypertrophy and eleven of lesions of the valves, there was not one case of rheumatism. In fine, in one hundred and thirty-four cases of organic diseases of the heart, which we have observed in these last few years, and carefully collected together, we ascertained in eighteen cases the complication of articular rheumatism, but in these eighteen cases we include that of an idiotic woman, on whose answers we cannot rely with any certainty. This is, as it must appear, so small a proportion, that the cases presenting this complication, may be considered as exceptions. Therefore, even admitting that the heart, as a muscular organ, may be subject to rheumatism, we are led inevitably to the conclusion, according to the actual state of the science, that the coincidence of organic lesions of this organ with articular rheumatism of the limbs is pretty rare, and much more so than it is generally said to be.

SYPHYLITIC AFFECTIONS.

The number of syphilitic affections which we have had to treat this year has been very small, being accounted for by the fact, that this hospital is not destined for the treatment of these diseases; we have only had some few cases which could serve for clinical instruction. We have been induced to treat of these diseases in this course on account of the great disagreement which has existed among practitioners for some years past, in the management of these affections. It may appear singular perhaps that a physician, not attached to a hospital especially destined to the treatment of those diseases, and who is not consequently as competent to treat them as those physicians who make it their special study, that he should venture to engage himself in such a contest; but as those that are competent differ in opinion among themselves, the examination of the question falls under the general domain of medicine, aud hence it is allowable to every physician charged with clinical instruction, to discuss it. It is even incumbent upon them to avow frankly their opinion, guided by the experience which they have acquired in the matter. Physicians who devote themselves specially and exclusively to the treatment of syphilitic diseases, have undoubtedly a great advantage over others in a practical point of view; but they are not protected from certain influences and causes of error, to which other physicians are much less exposed. Thus, many patients whom they treat, and who, after having been cured to all appearances of certain syphilitic symptoms, leave the hospital, are never more heard of by their physicians. But if these patients have a recurrence of the same affection, they take good care not to return to the same physicians, but they enter, generally, another hospital, or put themselves under another physician. Hence the impossibility for the first physician to obtain any definite results from his treatment, and hence there often ensues a false conviction on the part of the practitioner of the efficacy of his treatment. The primary symptoms, so simple in appearance, last often for a long time; and in order to judge fairly of the efficacy of a particular treatment, we must persevere in its use for a very long time, and continue with it even after all symptoms have disappeared.

Physicians agree pretty generally concerning the primary symptoms; but the same cannot be said in regard to the secondary. It has been said by some that there is no constancy in their appearance, that sometimes they develope themselves, sometimes they do not, without their being able to ascertain the presence of any of those conditions, which can cause this result to vary thus; so that finally, they are forced to delay the treatment of them until they develope themselves. It happens sometimes that these symptoms present themselves, even after a mercurial treatment; we must not conclude from this that mercury is not efficacious in this disease, but that the treatment has not been judiciously managed, or not continued for a sufficient length of time. I speak from experience; I have seen many patients treated, and have treated myself, many who have been affected with syphilis, and I have never seen the morbid symptoms return when they have been subjected to a methodical treatment. I was in the habit of administering anti-syphilitic preparations in small doses long continued. Dupuytren continued his treatment of the secondary symptoms only for the length of time which they took to develope themselves. This rule does not appear to us to be a sufficiently safe one, for if by chance the primary symptoms were to disappear very quickly, and that the secondary symptoms developed themselves in a short time, it would follow that the treatment would have to be a very short one, which in a great number of cases, would afford a sufficient safeguard against a return. Inconvenience results, on the other hand, from giving mercurial preparations in large doses, which is the practice of some physicians; in the first place because the mercury produces gastro-intestinal irritations, more or less severe; secondly, because in large doses it is apt to produce salivation in a very short time; which is a very annoying result, not only because it incommodes the patients, and prevents their sleeping, but also because it interrupts the treatment. During this interruption the syphilitic virus regains all its primitive strength, new symptoms may develope themselves, and we are finally obliged to recommence our treatment as if nothing had been done. The system, therefore, of giving mercury in large doses is a bad one. In giving it, on the other hand, in small doses, we may continue its use without interruption and without any inconvenience for a very long time. We are in the habit of continuing this treatment for five or six months, in giving mercury in the form of the deuto-chloride, in pills, in the dose of one-tenth of a grain night and morning, and the symptoms disappear without our having any apprehension of their return. We cannot insist too much upon the necessity of employing judiciously a similar treatment, and not to delay its application until more serious symptoms develope themselves; for in delaying a treatment, which employed in the right time may be very simple and very efficacious, we expose ourselves at a later period to see circumstances arise which will render it much more difficult, and often even useless. Thus, for example, how many individuals do we see, who having subjected themselves to no judicious treatment during their youth, delay taking care of themselves until they are on the eve of being married. To what serious inconveniences or painful preoccupations do these persons then find themselves subject.

As to the treatment of the secondary symptoms, we employ the mercurial preparations in the cases of

those individuals, who have not as yet undergone any treatment, whilst in the case of those who have already been treated by these preparations, we prefer employing the iodide of potassium, which has afforded the greatest success in our hands, as well as in those of many other practitioners. Employed in a judicious manner, we have nearly always seen it in the end triumph over the secondary and tertiary symptoms, even those of the most acute and chronic kind; we have seen it recently relieve the pains in the bones, overcome wakefulness, and thus afford the greatest relief to the afflicted, even in those cases where it may not be entirely efficacious.

TUBERCULAR AFFECTIONS.

We have had sixty-seven cases of tubercular affections of the lungs, nearly the half of which proved fatal. Forty-seven cases presented themselves in the six months of summer, and twenty in those of winter; eighteen cases were among the men, and forty-seven among the women. Notwithstanding the disproportion of the number of beds in the two wards, the number of women afflicted with tubercular affections, as is seen, is in a much greater proportion. It is, however, about the usual proportion.

About one half of these patients had not passed the age of thirty five, three were more than sixty years old, which proves that this disease, though much less liable to attack those advanced in years, is however sometimes met with in these persons, and that no age is absolutely exempt from it. Among those cases terminating fatally, there was one attacked with a most dreadful hæmoptysis; it very seldom happens that phthisical patients, though subject to these kinds of hemorrhages, succu nb immediately from the effects of this symptom. There have been two cases of pneumothorax; this is a very serious complication and generally fatal; the cause of its fatality is easily understood.

Treatment.

We shall not go into the details of the treatment in reference to certain symptoms of phthisis, such as sweats, the cough, the diarrhœa, etc., for which we must employ different means according to the particular indications. We shall confine ourselves to some considerations upon the general treatment. The causes of tubercles are as yet sunk in the deepest obscurity; and we are forced to give to this affection, for want of well determined causes, a spontaneous origin. The influence of inheritance upon the development of this disease is well ascertained. It is well known that the children of a phthisical mother are generally most subject to the same affection. But to what point does this influence exercise itself? This is a difficult problem to solve. It is also known that certain climates exercise a serious influence over this disease; but we know not at the same time, to what degree, and in what respect these climates are unfavourable. Experiments have been made upon animals, in order to develope tubercles artificially: they have been successful to a certain degree; but the results of these experiments are not in our opinion, applicable to the human species, so that we can draw no positive conclusion in regard to the question before us.

It is well known also that inflammation of the lung, that of the pleura, the eruptive diseases and other similar affections, favour very much the development of tubercles, and hasten their progress and their fatal termination; hence the precise indication is to combat these serious complications, and to place the tubercles in the most favourable physiological conditions, at least whenever it is possible; for we cannot combat efficaciously these phlegmasiæ without the aid of antiphlogistic means, and often we have to deal with individuals already very much enfeebled, and who cannot bear bloodletting. The chief point of attack should be directed against the tuberculous affection itself; this is undoubtedly very difficult, but not absolutely impossible.

Phthisis is not, in our opinion, entirely beyond all the resources of art and nature, as some other diseases, cancer for instance. We think that it is not absolutely incurable, and that at some period the means will be found to combat it efficaciously. There are tubercular affections which are cured with comparative ease. Those scrofulous tumours found in children are cured daily; and what happens in the tubercular ganglions, may very well take place in the other organs.

Is the tubercular matter susceptible of resolution? Can it, after having been naturally deposited in the tissues, be retaken by means of the absorbents in the economy? As respects these questions, what is certain and proved by experience, is that the pulmonary tubercles may become softened, that the sac where this morbid matter is collected may empty itself, contract, and throw out a species of false membrane of cicatrization.

It is also ascertained that finally the softened tubercles are transformed into cretaceous masses which become inoffensive, and whose presence is not at all detrimental to the preservation of more or less perfect health. Proof of these facts exist; we can merely explain them by hypothesis. Cases of tuberculous lungs, have been seen in autopsies, and indeed often cited in presenting empty cavities and cicatrices in subjects in which had been detected during life and long before death, the cavernous râle and the gurgling sound characteristic of tubercular softening. Pulmonary tubercles are therefore susceptible of cure. This is a point upon which there exists no doubt. Why then is the disease so seldom cured? Because that cause which produces one tubercle, will produce a thousand, if permitted to act, and unfortunately the means of paralyzing its action have been hitherto but very slightly efficacious, because these tubercles develope themselves in several points at the same time in consequence of the existence of a particular tendency to tuberculization in the organism, and the functional and organic disorders which result from it are so great that death is inevitable.

The chief point in the treatment of this affection is then to remove all causes tending to produce or develope the fatal germ. To attain this every thing has been tried; all the materia medica has been called into requisition. The multitude of remedies proposed in the treatment of this disease, proves sufficiently by itself what the nature of this affection is, and how difficult is its cure. The preparations of sulphur, the preparations of iodine have been sometimes employed with some success; but in the cases of cure which have been cited, is it to the remedies employed that we must attribute the success? is it not rather to the resources of the vis medicatrix naturæ? Setons, counter-irritants, fumigation of balsamic substances, as also the internal employment of certain substances, have sometimes been advantageous; they have procured some relief. But the good effects derived from them are not sufficiently constant or multiplied for us to decide positively in their favour. In short, all the remedies furnished by the materia medica have hitherto generally failed. It was necessary, consequently, to employ other means; recourse has been had principally to hygiene.

Mineral waters have been employed, principally those which abound in the salts of sulphur; thus the waters of Bonnes have been used and extolled, as also the waters of Baréges, Luchou, &c.; finally, lately the waters of Chelle (in Savoy) have been very much extolled, which appear to be superior to the others in consequence of a combination of sulphur and iron which they contain. All these waters appear to exercise a happy influence upon the phlegmasia when it exists in the first degree. In fine, wherever a remedy is not dangerous, we must not neglect it; we must try it, above all, when we are treating a disease which resists all known remedies.

Hygiene produces in these cases effects, sometimes, which the materia medica does not; we place a great deal of confidence in hygienic measures well directed, in the change of climate, for example, in voyages. This is also the opinion of all experienced practitioners. But what is the influence of a new climate? Is it owing entirely to a change of air? It is probable that the air is but one of the elements in this favourable condition of change of climate. In fact, when we change climate, we do not only change air, but every thing, food, habits, manner of living, in a word, we find ourselves in a new sphere of action, of ideas, and of impressions which must necessarily act on the organism and modify it very much. Thus have we sometimes seen poor unfortunate sufferers embarking, in an almost dying state, for a long voyage, find themselves immediately much better, breathe with more ease in the midst of the ocean, and then return after a distant voyage, if not entirely cured, at least in an infinitely better condition than before their departure. How do these causes act? We are as ignorant of their action as of the development of the tubercle, which under the influence of some causes manifest themselves in the organism in the flower of youth. It is but natural to suppose that a change of climate, a new mode of living, a complete change in all the hygienic measures, are all new conditions, which must necessarily produce great modifications in the economy; that these are also capable of modifying the natural tendency in certain persons to the production of tubercles, or to arrest their evolution. It is therefore a rational practice, to advise, as much as the particular circumstances of the case permit it, a change of climate and distant voyages. Experience authorizes us to anticipate the greatest advantages from the practice.

Paris, August, 1843.

CONTRIBUTIONS TO THE HISTORY OF MALARIA.

[Communicated by Professor DUNGLISON.]

Philadelphia, Nov. 20, 1843.

MY DEAR SIR,—The following communications relate to a terrestrial or geological phenomenon, always of deep interest to the profession; and I have no doubt, that the respectable and intelligent writers will pardon me for making them public.

I am, my dear sir,
Very truly yours,
ROBLEY DUNGLISON.

Dr. Clymer.

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Philadelphia, January 18*th*, 1843.

SIR,—Your remarks on the subject of Malaria, in a lecture] a few afternoons since, bring to my mind, in a manner more forcible than they were ever presented to it before, some circumstances which came under my observation in the year 1841. Late in the month of July of that year, I was put in medical charge of a party of about forty persons, who were about making a journey from Fort Van Couver, on the Columbia river, to the mouth of the Rio Sacramiento, in Upper California. After we had proceeded about one hundred and thirty miles, and had reached the banks of the Wallamette, opposite the American Missionary settlement, counter-orders reached us, and we were detained, encamped immediately on the bank of this river for a month or nearly so. During this time, almost the whole party were attacked with intermittent fever, generally assuming the tertian type; and, in a few instances, the quotidian. I was called also to several cases in the neighbouring country. Through this region runs the Wallamette, a rapid stream two hundred yards wide. The shores are thickly covered with a fine growth of pine and other trees, and the undergrowth is rich and luxuriant. A very short distance from the river, the country is prairie (hill and dale), with occasional groves and narrow strips of oak; and here there is no undergrowth (except a high grass, which does not rot in summer, but is perfectly cured, there being no rain) the surface being as clean as if attended to with the most constant care. The climate is very peculiar. In midsummer, when we were there, the thermometer frequently ranged from 80 to 85° F. in the shade, and, notwithstanding this great degree of diurnal heat, there was often frost; and sometimes ice an eighth of an inch in thickness at night. The whole river-region was enveloped in a thick fog every morning, so thick sometimes, that it was impossible to see a man twenty steps off. The weather was perfectly clear almost the whole time; there not being rain, enough to wet to the skin during the month. The soil is generally light, and gravelly. We lived in tents *immediately* on the bank of the river, sleeping on the ground from which we were only separated by a blanket or bearskin. The missionaries and other whites, living on the river in houses, were affected with the malady, but not to so great an extent as ourselves; and numbers of the Indians had it also. It was equally prevalent on the *upper* part of the Columbia, where the whites in the employ of the Hudson's Bay Co., and the Indian inhabitants suffered largely. But, in the settlement at the mouth of the Columbia, near the sea, I was informed, that the inhabitants were entirely free from it, as were those few settlers, who lived in the upper country at a distance from the large water-courses. In some districts, the Indians have died by hundreds. This is probably, in part at least, owing to their mode of treatment, which consists in heating themselves in a vapour-bath and then plunging suddenly into the river. I have seen the bones of a whole village occupying one common grave! It is as fatal among them as cholera. *The Indians say, and some white men, who had been there a number of years, concur with them, that they were strangers to the disease till the whites came there to inhabit. And one or two of the oldest white settlers, men who have lived there thirty years or more, attribute its appearance, without hesitation, to the turning up of the soil for agricultural purposes. They say, that in any of their river regions, the sticking of a plough or hoe into the ground is followed by ague, at certain seasons of the year, as invariably as the thunder-clap succeeds a flash of lightning.* These are the statements of people who are, of course, entirely ignorant of the principles of medicine or philosophy; but in a matter of mere fact, their observation is, probably, as much to be relied upon, as that of persons of much more cultivated minds, especially when we consider, that they

can have no theory to support, and are consequently free from the very strong prejudices and fallacies of reasoning, which so frequently arise from this source. What staggers my belief on this subject, however, is, that the quantity of cultivated ground seems to me to be too small to produce such direful and wide spread effects, the country being very sparsely inhabited by whites, and the aborigines not cultivating it at all.

If what I have related possesses any interest, I hope that circumstance may serve as an apology for my having troubled you so much. With great respect, I am, Sir, your very obt. servant,

J. S. WHITTLE,
Asst. Surgeon, U. S. Navy.

To Professor Robley Dunglison.

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Philadelphia, June 28, 1843.

DEAR SIR,—The tarro (a species of arum) the roots of which are extensively used as food by nearly all the Polynesians, requires to be cultivated in shallow fresh water; and where natural marshes do not occur, they are constructed artificially by the natives. In such situations, it is common to find their towns, on all Islands within the tropics, in the Pacific ocean, standing in the midst of, or surrounded by "tarro patches;" suffering from musquitoes, and sometimes from the stench of stagnant water.

Such places were visited by the officers and scientific corps of the late Exploring Expedition, at the Friendly, Society, Fejee, Samoan, and Sandwich groups of Islands, without having in a single instance, to my knowledge, met with a case of intermitting fever, either amongst the natives or foreigners; or having suffered from the marshy atmosphere ourselves, although we were frequently exposed to it both day and night; most commonly we suffered from the violent heats of the tropical sun all day, on our shore journeys, and slept in open huts in the vicinity of the tarro patches at night.

On the arrival of the Expedition on our North West coast, I was one of a party who started immediately to the interior, and remained on the Willamet river about one month, at a place near which there was *no marshy ground*, that could lead us to suppose the "intermittents," by which we ALL suffered, could have their origin in them. Both the earth, and atmosphere were remarkably dry.

About the first of June, last year, I, with several of my voyaging companions, was attacked with intermitting fever, while crossing the equator, about midway in the Atlantic ocean, in the voyage home on board the U. S. ship Vincennes.

From the above observations, connected with previous suffering from the disease, I was led to make the remark to you, that the causes of intermitting fever, must be sought for in other sources than marshy exhalations.

If my humble experience can in any way prove useful, it will afford great pleasure to

Your obedient servant,
T. R. PEALE.
Zoologist to the Exploring Expedition.

To Prof. R. Dunglison.

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Extract of a letter, dated Fort Macomb, Middle Florida, Jan. 11, 1842, *from Dr. R. S. Holmes, U. S. A., to Dr. James R. Speer, of Pittsbargh.*

"My post, of which I have the sole medical command has been long known as the most unhealthy in Florida; so much so that it is always abandoned about the first of May, and not reoccupied until September. What influence makes it bear such a character, I cannot imagine. A full and rapid stream, of about one hundred yards in width, called the Swanne, flows by it. This river is navigable for steamboats fifty miles above this; is very deep; has not a single weed or decayed vegetable in it, and flows at the rate of three miles an hour; its banks are formed of light granular disintegrating limestone; the country around is dry, and thickly covered by a profuse growth of tall pines: there is not a marsh within five miles of us, and even then one that scarce deserves such a title; there is not a greater undergrowth of vegetable matter than I have seen about the most healthy posts in Florida, and the dry sand, which covers the whole country like a mantle, absorbs water like a sponge. I am inclined to think the geological nature of the banks of the river has something to do with the malaria, so prevalent here. I can conceive of nothing else: the situation is high, and a perfectly dry one, yet I have scarcely ever less than twenty on my sick list from sixty-six men; probably twenty more in the company are so debilitated with disease that they are unfit for active duty in the field."

BIBLIOGRAPHICAL NOTICES.

Practical Medicine; Illustrated by Cases of the Most Important Diseases. Edited by JOHN M. GALT, M. D. Philadelphia: Barrington & Haswell, 1843. 8vo. pp. 328.

The collection of cases of which this work is composed, are selected from the papers of the Editor's father, Dr. Alexander D. Galt, who had an "extensive practice in Williamsburg, Virginia, and the neighbouring counties, for about forty years." Dr. Galt was a pupil of the late Sir Astley Cooper. The present cases were written amid the arduous labours and distractions of country business. The chief value of the work, and which warranted its publication, are the descriptions, doubtless faithful, of the diseases of the section of country in which the author practised. Dr. Galt seems to have been a successful practitioner in the diseases mentioned in this volume—these are Intermittent and Remittent Fevers, Inflammations of the Pleura and Lungs, Inflammation of the Bronchia, Colic, Dysentery, Rheumatism, and a number of Miscellaneous Cases.

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Anatomical Atlas, Illustrative of the Structure of the Human Body. By HENRY H. SMITH, M. D., etc. etc. Under the Supervision of WILLIAM E. HORNER, M. D., Professor of Anatomy in the University of Pennsylvania, etc. Part I. 130 Figures. Philadelphia: Lea & Blanchard. 1844. 8vo. pp. 56.

This is an exquisite volume, and a beautiful specimen of art. The utility of illustrations in acquiring a knowledge of a purely practical art, is universally admitted. The student of anatomy refers to his plates in his closet, in order to follow the description in the text book. The practitioner finds himself constantly obliged to refresh his memory on some anatomical point, and when circumstances do not admit of a direct appeal to the subject, drawings accomplish his purpose. We have

numerous anatomical atlases, but we venture to say none equal in cheapness to the present volume, and none surpass it in faithfulness and spirit. Its claim, as is stated in the preface, is to have been selected from the most accurate sources, as well as from the latest microscopical observations on the anatomy of the tissues; and where plates were not deemed satisfactory, to have been enriched by original drawings, from specimens furnished by the Anatomical Museum of the University of Pennsylvania.

"In the arrangement of the work it will be seen that reference has been had to the production of a volume suited to general circulation, of such a size as could be conveniently used in the lecture, dissecting, and operating room, with a Terminology sanctioned by general usage in the United States, and with concomitant references on the same page, thereby saving to the young student much embarrassment and confusion. Lastly, it has been placed at such a price as will render it easy of acquirement by all."—*Preface.*

We again have much pleasure in referring to Mr. Gilbert as the artist; he has already acquired a deserved reputation in this branch of his art; and on this occasion he has been seconded by the printer, the cuts being most admirably "worked off,"—we believe that is the technical phrase.

We strongly reccommend to our friends, both urban and rural, who need anatomical plates, the purchase of this most excellent work, for which both editor and publishers deserve the thanks of the profession.

The Dissector, or Practical and Surgical Anatomy. By Erasmus Wilson, Author of a "System of Human Anatomy," etc. *With one hundred and six Illustrations. Modified and Rearranged.* By Paul B. Goddard, M. D., Demonstrator of Anatomy in the University of Pennsylvania. Philadelphia: Lea and Blanchard. 1844. 12mo. pp. 444.

This is a well printed large duodecimo volume, copiously illustrated, with the descriptions clearly and tersely written. The work "has been carefully modified in such a manner that the student, by following the order of parts as they are laid down, will obtain the utmost advantage which can be derived from a single subject."—(Preface to the American edition). From careful inspection we should say that the young dissector could not have a better guide, and its selection from other English works of the same class by Dr. Goddard, is strong evidence in favor of its excellence.

THE MEDICAL EXAMINER.

PHILADELPHIA, NOV. 25, 1843.

In the 20th number of this Journal an article appeared in the "Retrospect," copied from a late number of the London Medical Gazette, and written by Dr. Knox, of Edinburgh, the object of which was to deny the claims of Professor Horner, of this city, to the discovery of the Tensor Tarsi muscle, and to 'restore' it to Duverney. A severe scrutiny of the claims of our countryman took place in Europe on the announcement of the discovery in 1824, and the discovery conceded to him. The tensor tarsi muscle, as described by Dr. Horner, lies on the posterior face of lacrymal sac and ducts; it is oblong; and in the adult, is three lines broad and six long. It arises from the posterior, superior face of the os unguis, and running forward, is inserted by a bifurcated termination into the puncta lachrymalia. Duverney's muscle arises from the os planum, and is inserted into the tendon of the orbicularis. Rosenmuller's description, mentioned by Dr. Knox, is a repetition of Duverney's. Professor Horner's claims are, we believe, now universally admitted by all anatomists of note, amongst others we may mention Theile, one of the latest and best authorities, who was especially selected to furnish the volume on the muscles to the new Anatomical Encyclopædia, now pasing through the German press.

DR. ASHWELL ON IRRITABLE UTERUS.

"Irritable uterus" is the next affection to which the author's attention is directed, and in this section we find much that is valuable in reference to the diagnosis of this form of disease from the many others with which it is frequently confounded. The correctness of the term "irritable uterus" is questioned, and with much justice; before the writings of the late Dr. Gooch, whose admirable description of the disease first drew sufficient attention to it, physicians were accustomed to believe in the occurrence of inflammation as the cause of the frequently urgent symptoms grouped under the head of irritability. An error is now far too common of believing in the frequent existence of irritability of the uterus rather than of inflammation, and the practice pursued in accordance with such views commonly falls short of its intended object, no benefit results, and the disease runs on, its severity alone ameliorated by the frequent exhibition of sedatives. The symptoms of this affection, stripped of the obscurity which their existence in persons of hysteric diathesis often throws around them, are, in fact, distinctly those characteristic of inflammatory action.

"That the disease in question (says Dr. Ashwell) should be regarded as a modified inflammation of the cervix uteri, is a view in accordance not only with symptoms, but with the results of the most successful treatment. It is difficult to understand that there shall be redness, which I have several times seen by the speculum, heat, permanent pain, and the tenderness of the neck of the uterus, a glandular part, without believing that its vascular and nervous structures have undergone some change. Judging, also, from the marked relief afforded by cupping, leeching, aperients, and spare diet, what more tenable and satisfactory conclusion can be arrived at than that the so-called irritable uterus is dependent on subacute or chronic inflammation—a position, the truth of which is fully substantiated by those changes of structure which, although slowly, and not till after many years have, nevertheless, occurred, in cases which till then were regarded and treated as examples of irritable or neuralgic disease."

Several interesting cases illustrative of the efficacy of anti-phlogistic treatment in this class of affections is given, more especially of the employment of local depletion.—*Prov. Medical Journal*, Sept. 16, 1843.

RETROSPECT OF THE MEDICAL SCIENCES.

ON BRONCHIAL BLENORRHŒA, ETC., CONSIDERED IN CONNECTION WITH RHEUMATISM.

BY R. R. CHEYNE, SURGEON.

My observation has been for some time past turned upon a well marked form of what may be called bronchial blenorrhœa, which is clearly dependent upon the metastasis of rheumatism, or at least, upon the rheumatic diathesis and which is as clearly unconnected with bronchitis. As this affection, as far as I know, has not been described, I will sketch a case which, in most respects, may be considered a type of the whole class; and at the same time, I will point out the remedies which, in my hands, have been strikingly and uniformly beneficial.

Case.—Mr. B., æt. about 60, a strong healthy man, whose occupation exposed him, for many hours daily, to a very high temperature, and subjected him constantly to profuse perspirations, became in June last, affected with troublesome cough, without expectoration or dyspnœa. His pulse was natural and skin cool; his appetite was deficient; he became weak and out of spirits, perspired profusely at night, and passed little urine, which was loaded with the lithates. At the end of a week he began to expectorate large quantities of muco-purulent fluid, without relief to his cough; he got weaker and lost flesh; so much so, that his friends feared consumption, to which view of the case, however, auscultation gave the negative, inasmuch as, at first, no morbid condition whatever could be detected, and it was only when free secretion was taking place, that rhonchi could be heard shifting about in every ramification of the air-tubes. Besides, percussion elicited a clear sound over the whole of the chest. Now, the treatment of the patient, during a fortnight, consisted in the application of a blister, the use of mild doses of mercury and ipecacuanha until the gums were slightly touched, and of occasional opiates at night to relieve the cough; at the same time the diet was strictly regulated. This plan, which was steadily pnrsued, failed in controlling the symptoms. My patient was then sent a few miles into the country, where I continued to visit him daily; and (as the enormous expectoration was producing great debility, and there was a total freedom from fever), I changed the treatment, and prescribed quinine with iron, and a liberal diet. Nevertheless, the disease still defied the remedies, after three weeks' duration. I must confess I was now puzzled, until one morning I found my patient complaining of an attack of severe pain in the ankle-joint, which was not accompanied by either swelling or redness; and in addition, I then learnt that he had been for a year or two occasionally subject to pain and slight puffy swelling of the right knee-joint, though never to the degree of confining him to his house. He now, also, recalled to mind, that he had felt great weakness in the knee, but not in the ankle, just before his present illness. These invaluable hints of the true origin of the complaint, I was not slow to act upon. I at once ordered for him a pill composed of two grains of the acetous extract of colchicum, and three grains of the compound extract of colocynth, to be taken at night as an aperient; and, in the course of twenty-four hours, a mixture containing of Iodide of Potasium ℈j., of liquor Potassæ, and tincture of Henbane aa. ℥j. in Mist. Camph. ℥vj. He was also directed to place his feet every night and morning, in a hot mustard and water bath.

In so short a period as three days, under these remedies, the bronchial blenorrhœa was reduced to half its former quantity, and at the end of a week it had ceased altogether. Soon afterwards his cough left him; and his health and strength were rapidly restored.

Two facts may, I think, be fairly deduced from the history of this case; viz. first, that a peculiar irritation of the bronchial mucous membrane, with profuse secretion, constituting a distinct kind of bronchial blenorrhœa, may be induced by the rheumatic diathesis; and secondly, that iodide of potassium (as in the above formula) is, undoubtedly a medicine of astonishing power over this state of the mucous membrane. I may add, that colchicum in my hands, has frequently proved to be of greatly inferior efficacy.

I can, certainly, come to no other conclusion but that the description I have given of the above disease cannot, with any regard to accuracy, be identified with that of any form of bronchitis, unless the latter term be used without the least reference to the actual symptoms.

Having thus endeavored to show, by analysis, the existence of a rheumatic form of bronchial blenorrhœa, I will now, in order to make the evidence as conclusive as I can, examine the subject by a method like that of synthesis, in briefly alluding to a class of morbid phenomena, often excited in another tract of mucous membrane; viz. the genito-urinary, which phenomena clearly evince the close connection that obtains between either irritation, or simple discharge from that membrane, and the development of rheumatism, in individuals who possess the rheumatic diathesis. For example, gonorrhœa, urethral blenorrhœa, and even the irritation and discharge sometimes brought on by the passage of a bougie (as I have again and again witnessed), may be excitants of rheumatism. Lucorrhœa, also, is often attended by the same complication, especially in the form of neuralgia, to which young women are extremely predisposed. Lastly, I may observe, that, for the supervention of rheumatism, it is by no means necessary that this irritation, and increased secretion, be of a specific nature, as in gonorrhœa. It was with reference to what has been named gonorrhœal rheumatism, that Swediaur, who first noticed it, asks the question, whether, in such cases, gonorrhœa is not rather arthritic than syphilitic; and I am, myself, almost disposed to agree with Richter, and others, who attribute most forms of these discharges to transferred rheumatic action.—*Lon. Med. Gazette*, Sept. 15, 1843.

EXTRACT OF INDIAN HEMP.

Mr. Savory has communicated to the "Pharmaceutical Journal" the following formula for preparing the extractum cannabis Indicæ:—Take of gunjah (finely bruised), four pounds, avoirdupois; rectified spirit (0.838), five gallons, old m.; macerate the gunjah in two gallons of the spirit for seven days, then strain off and add one gallon more of the spirit; let this stand four days, and strain; mix the two tinctures and filter; then boil the hemp in the remaining two gallons for fifteen minutes, and filter *while hot*. Let all the tinctures be mixed; then distil off the spirit and evaporate the remainder in a water bath to the consistence of an extract. Produce—twelve ounces.

Prov. Med. Journal.

VITAL STATISTICS OF SHEFFIELD.

One of the most prosperous trades in Sheffield is the silver and plated manufacture. Until the last two years it has not shared the distress experienced by all engaged in making cutlery. The workmen belonging to this branch amount to 400, and form several unions, the restrictive laws of which are effective, even in times of bad trade. The earnings of men vary from 18 to 42 shillings, and of women from 8 to 15 shillings a week.

The workmen in this manufacture are sober, intelligent, steady, and are, or were, in tolerable circumstances. This is attributable to various causes. First, the rule of the trades' union, which prohibits the masters from taking apprentices, has reduced the number of workmen, formerly superabundant. Secondly, the expensive materials and tools used in this trade, prevent that sudden conversion of men into masters which is so common in so many other occupations. Thirdly, children are rarely employed in this trade, much under fourteen years of age. Fourthly, the workmen are not liable to be thrown out of employment by machinery. This occupation is neither particularly detrimental to health, nor conducive to longevity. In the Silversmiths' Benefit Society, the mean age attained by those who die above the age of 10 is 59.12; while among the working classes, generally, of Manchester, Leeds, and Liverpool, it is 58.97; so that the advantage in favor of the silversmiths is slight indeed. In rural districts the mean age attained by persons above 40, is 68.76. What a difference!

Next come the *saw manufacturers*.

"The workmen in this branch of trade are, perhaps, in no degree inferior in intelligence, sobriety, and general good conduct, to those in the manufacture of which we have just treated. They have both, equally, their respective unions, which regulate wages, the introduction of apprentices, and which, in time of sickness, afford a weekly allowance."

In the branch called *par excellence* saw making, there are 208 journeymen, of whom about 20 are not in the union; 130 boys—being, indeed, more than the rules of the union allow; and about one woman or girl to every eight men.

Nine-tenths of the men are in sick clubs; nineteen out of twenty, can read and write; and their average wages are 28 shillings a week, the extremes being 24 shillings and 45 shillings.

The *saw grinders* are fine healthy men, who generally live in the country, and often add the cultivation of a plot of ground, or even a small farm, to their mechanical occupation. They are peculiarly liable to accidents, and of 42 saw grinders who have died since 1821, 5 were killed by the breaking of stones.

Dr. Holland gives a list of 13 accidents, being a part of those which have happened to 78 living members in the union. Most of them are very serious, *e. g.* "3. Drawn over the stone; severely hurt; in bed nine months." "9. Arm severely lacerated; lame three months."

The *edge-tool makers* are well paid, but are a less intelligent class than those previously mentioned. The number of *foremen* and *strikers* is equal in this trade; the former are said to earn, on the average, £1. 14s., and the latter £1. 2s. a week.

The account is furnished by a manufacturer, and, though no doubt accurate as far as it goes, is defective in an important point. We do not learn from it how many months in the year the men are at work. The prices have been strictly enforced, even during the last three years, but for what portion of that time have the men obtained them?

Three-fourths of the workmen in this branch are in sick clubs; but only one among five adults can read and write. Trades that require strong arms rather than acute heads, will be favorable rather to sensuality than intelligence; a blacksmith drinks more than he reasons; and Dr. Holland finds that the forgers of Sheffield have big occiputs, but low, retreating foreheads.

The spring knife makers are badly paid, and badly educated. "A few superior workmen may earn from 30s. to 40s. per week. In the first manufactories of the town the average is from 16s. to 25s. But in many of the inferior manufactories, the workmen are receiving no more than 12s. or 16s.

Moreover, when Dr. Holland was writing, in June 1843, this scale of wages was very greatly reduced.

This branch is not in union; not above half of the adults can read, and not one-fourth moderately well; about two-thirds only of the adults are in sick clubs.

Two circumstances combine to depress wages in this department. The most important is the smallness of the capital required to set up as a cutler. A few pounds are sufficient. The other one is the facility which this branch offers for the employment of children at an early age.

The *file trade*, as regards the circumstances of those employed in it, holds a middle place between the silversmiths and saw-makers, who are above, and the spring knife cutlers, who are below them.

The branch of the file trade called *forgers*, consists, like the edge-tool makers, of foremen and strikers; but the profits are more equally divided between the two classes of workmen in the present instance; a foreman averaging £1. 12s. 10d. a week, and a striker £1. 6s. 9d.

As to *file-cutters*, by reference to thirty books of file-cutters, men of *steady* habits, each having the assistance of a boy, the average per week was found to be £1. 18s. 6d. Eighty per cent. of the adults can read, and seventy can write. The proportion among the boys is rather greater; which may either show that education is making way, or that a certain number of adults forget their little scholastic learning.

The *fork-grinders* carry on the most unwholesome trade in the kingdom. Fork-grinding is always performed on a dry stone, and the clouds of stony and metallic dust produced in the process, clog up the respiratory organs, and cause grinders' asthma, a disease which carries off its victims in a majority of cases, before the age of thirty!

The better the state of a given trade in Sheffield, says Dr. Holland, the smaller is the proportion of minors employed in it. Thus in the silver-plated branch, the minors are to the adults as 16 to 100; and among the edge-tool makers, as 12½ to 100. In the spring knife branch the per centage is about 25; but among the fork-grinders the minors actually outnumber the adults, as there are a 100 boys to only 97 men!

Of the ninety-seven, about thirty are at this moment suffering from grinders' asthma. It is remarkable that in this destructive trade the men are ill paid, but Dr. Holland does not say what their wages are. Nor is their education superior to their condition; for of the 197 men and boys, one hundred and nine can only read, and 69 can write.—*London Medical Gazette*, Sept. 8th, 1843.

SPUTA IN BRONCHITIS. BY DR. SIMON, OF BERLIN.

In consequence of a very violent attack of bronchitis, the patient expectorated a purulent mucus, in

which Dr. Schönlein detected a white, filiform substance, which fell to the bottom; when this was placed in water, it was observed that several long, fine threads, ramifying as from a tree, shot off from the trunk of the white, filiform substance, and ran off in extremely fine terminations, which, on gently moving the vessel in the water, floated to and fro; on placing these in acetic acid, they swelled and become changed into a transparent jelly, which was in a great measure dissolved after digesting for a considerable time; ferrocyanuret of iron produced in this solution a precipitate; under the microscope these threads exhibited the structure of coagulated fibrine. There is no doubt that in this case, in consequence of the inflammation of the bronchi and of their finest ramifications, plastic lymph was effused in the latter, which was expectorated in the coagulated state.—*Provincial Medical Journal, from Beiträge Zur Physiologischen und Pathologischen, Chemie und Mikroscopie.*

FORMULA FOR OPODELDOC.

In the October No. of the Journal of Pharmacy, Mr. Augustine Duhamel gives the following formula for Opodeldoc, which, with a slight difference, is the one proposed by the Committee of Revision of the U. S. Pharmacopœia. It possesses the advantage over the present preparation, of not coagulating, as does, invariably, the officinal preparation.

CAMPHORATED TINCTURE OF SOAP.

(*Soap Liniment.*)

Take of Soap, in shavings, . .	16 oz.
Camphor, ...	8 oz.
Oil of Rosemary, . .	2 fl. oz.
Alcohol, ...	7½ pints.
Water, ...	½ pint.

Dissolve the soap in water, by heat; then mix with it the alcohol in which the camphor and oil have previously been dissolved: lastly, filter.

THE HYSTERIC DIATHESIS.

BY DR. S. ASHWELL.

"It is of great practical utility to remember that, where the hysteric diathesis really prevails, recoveries sometimes occur from states in which all hope has been laid aside. Thus, paralysis and difficulty of swallowing, and great debility, are extraordinarily recovered from; and occasionally when phthisis and the emaciation supposed to be its direct result have reached an apparently hopeless point, the patient most singularly and inexplicably begins to recover. I have sometimes thought that an impression on the mind of the sufferer of the certainty of a fatal result, if the disease persisted, was the first link in the chain of events, marking a gradual restoration. I am, too, quite certain that the progress of phthisis is often slower in the hysterical than in any other class. These and other considerations establish the extreme importance of an accurate and comprehensive knowledge of the symptoms and varying aspects of hysteria."

The treatment of the disease is divided into that applied to hysteria dependent on plethora, or debility, and on gastro-intestinal disorder, but nothing possessing the charm of novelty is presented to us, and Dr. Ashwell, like all other writers and physicians of the day, is obliged to treat symptoms and employ the same means as in times past.—*Provincial Medical Journal*, Sept. 16, 1843.

URINE IN PNEUMONIA AND PLEURO-PNEUMONIA.

BY DR. F. SIMON, OF BERLIN.

In a case of pneumonia, and in another of pleuro-pneumonia, a species of urine was observed, which was remarkable at once for its extremely peculiar properties, the same in both cases, but deviating from the normal properties of urine, and also in this respect, that, as Dr. Schönlein ascertained, its appearance coincided accurately with the occurrence of resolution of the inflammation. In the first case of pneumonia, the urine during the violent inflammatory stage was dark, very acid, and unaccompanied by any sediment; at the time of resolution it was pale and neutral. One morning I found the urine of this patient yellow, neutral, and with a sediment of white crystals perceptible to the naked eye; the microscope instantly showed, by the remarkably beautiful form of the crystals, that they consisted of the triple combination of magnesia, ammonia, and phosphoric acid. The peculiar character of the urinary fluid itself surprised me; it was completely neutral, and every acid, even dilute acetic acid, produced in it a white precipitate, so that the first instant I suspected the presence of a caseous matter, but soon convinced myself, however, that this was not the case, for when I allowed a part mixed with hydrochloric acid to stand for some time, a precipitate was formed of beautiful, almost colorless uric acid crystals; these were also formed when I heated a part with acetic acid, and let it stand for some time. Alcohol formed a rather considerable precipitate, which was washed on a filter with alcohol; a portion of this precipitate was abstracted by warm water, which, on evaporating the water, remained behind; this was almost perfectly consumed on a platinum dish; when rubbed up with caustic potash it developed ammonia; heated with nitric acid, the presence of a great quantity of uric acid was ascertained. Whatever portion of the precipitate caused by alcohol was not dissolved in warm water, was readily taken up by hydrochloric acid, and again precipitated from the acid solution by ammonia; with the microscope I recognised this precipitate occasioned by ammonia as ammonio-magnesian phosphate. From this it results that the white precipitate occasioned in the urine by any acid, was uric acid, which was found dissolved in the urine in so extraordinary a manner combined with ammonia—a circumstance which, in my opinion, has not yet been noticed up to the present moment.

In the second case of pleuro-pneumonia, which occurred at a subsequent period in Dr. Schönlein's clinical wards, a species of urine was voided at the time of the resolution, which corresponded in every respect with that just described, especially with respect to the remarkable property now mentioned; here, too, we had the beautiful crystalline sediment of triple phosphate of magnesia, and the precipitability of the urine by any acid. Two important questions arise here, one of which may be easily answered by accurate observation—namely, whether this peculiar phenomenon in the urine is connected with the process of resolution of the inflammation in the respiratory organs? The second question is probably not so readily answered—namely, what sort of connexion this is? We may content ourselves at once with the solution of the first question, which appears of sufficient importance for the prognosis, and for which every practical physician will find an occasion at the sick bed. We may observe, that the phenomenon here remarked was observed in the urine for three or four days, and that in both cases a recovery took place.—*Prov. Med. Jour.*, Sept 9, 1843.

DR. CHRISTISON ON THE NEW MODE OF DETECTING ARSENIC.

A short time since Professor Reinsch proposed an entirely new method of detecting arsenic, which consists in acidulating any suspected fluid with hydrochloric acid, and heating a thin plate of bright copper in it, upon which the arsenic is deposited in a thin metallic crust, and then separating the arsenic from the copper, in the state of oxide, by subjecting the copper to a low red heat in a glass tube. Organic fluids and solids may be prepared for this process by boiling them for half an hour with a little hydrochloric acid, solid matters being cut into small shreds, sufficient water being added to let the ebullition go on quietly. Continue the boiling until the solids are dissolved, or reduced to minute division. Nothing can be more easy than the method of Reinsch. It is also exceedingly delicate; for it will detect a 250,000th part of arsenic in a fluid, and it does not leave any arsenic in the subject of analysis which can be detected by any other means, even by the delicate process of Mr. Marsh. I have lately employed it as the means of furnishing irrefragable evidence in criminal inquiries.

The separation of arsenic upon copper, from a solution, by means of hydrochloric acid and heat, is a new fact in chemistry; and the experiment furnishes a test so far, that, if the copper be not tarnished, arsenic cannot be present. But Reinsch's discovery cannot be regarded as a positive test, because, as he himself has pointed out, bismuth, tin, zinc, and, above all, antimony, will, under the same circumstances, yield a coating to copper sufficiently similar to render it necessary that the deposit be examined otherwise than by the eye only. Reinsch's process, however, is of far greater value than if it had merely presented a new test for arsenic. It constitutes the easiest and most secure mode of so separating arsenic from complex mixture as to enable experimentalists to apply to the metal any of the tests for arsenic already known; and, in my opinion, no method of testing for it approaches the following in conclusiveness. Cut the copper on which the arsenic is deposited, into small chips, so that they may be easily packed at the bottom of a small glass tube. Apply a low red heat.—A white crystalline powder sublimes, in which, in the sunshine, or with a candle near it, a magnifier of five powers will show the equilateral triangles composing the facets of the octaëdral crystals which are formed by arsenious acid when it sublimes. Sometimes the three equal angles, composing a corner of the octahedron, may be seen by turning the glass in various directions. If triangular facets cannot be distinguished, owing to the minuteness of the crystals, then shake out the copper chips, close the tube with the finger, and heat the sublimed powder over a very minute spirit-lamp flame, chasing it up and down the tube until crystals of adequate size are formed. Next, boil a little distilled water in the tube over the part where the crystalline powder is collected, and, when the solution is cold, divide it into three parts, to be tested with ammoniacal nitrate of silver, ammoniacal sulphate of copper, and sulphuretted hydrogen, either in the state of gas or dissolved in water. I am surprised that, during the last four or five years, neither Orfila, nor M. Lassaigne, nor Liebig, nor Mr. L. Thomson, nor Mr. Watson, nor Mr. Marsh himself, nor any other experimentalist, excepting in Scotland, has thought of applying, as a test of an arsenical crust, the conclusive process described above, and first suggested to me in 1826 by the late Dr. Turner, which consists in converting the metal into the oxide in such a way as to allow the form of its crystals to be determined. The method has been in constant use in medico-legal researches in Scotland. Yet, what other method is so satisfactory? What substance, other than arsenic, yields the white sublimate with triangular facets, or leaves the substance in such subjection to so many excellent tests?

In boiling substances in the weak hydrochloric acid, a decided excess of acid must always be present,—two fluid drachms to every eight ounces of liquid; but if the matter be animal texture in decay, much more acid may be necessary, owing to the presence of ammonia, which gradually neutralizes the acid as the solution goes on. Filtration of the fluid after the acid has acted sufficiently seems advisable, otherwise organic particles may attach themselves to the copper, and give rise to empyreuma when the metallic arsenic is driven off by heat. Where the arsenic in the fluid is supposed to be small, nearly half an hour should elapse before the copper, or copper-leaf, is removed. Before applying the sulphuretted hydrogen as a test to the solution of the sublimed oxide, the solution must be acidulated with hydrochloric or acetic acid. In every case the whole process should be applied in the first instance to distilled water, acidulated with the hydrochloric acid to be employed afterwards; and if the copper be tarnished, a purer acid must be obtained, or the copper must be subjected to the subsequent steps of the process, in order to ascertain whether the tarnishing be occasioned by arsenic or not.

I have successfully employed the preceding method in two medico-legal cases, where the bodies had been buried for four months, and I consider that it must soon supersede the beautiful but much more elaborate method of Marsh.—*Lancet, from Lon. and Edin. Jour. of Med. Science.*

CASE OF DISLOCATION OF THE ODONTOID PROCESS OF THE AXIS, AND ITS EFFECTS UPON THE NERVOUS FUNCTIONS.

An unmarried woman, twenty-one years of age, and who had ever previously enjoyed good health, became, at the commencement of 1841, suddenly subject to stiff-neck, which she attributed to having taken cold. She could certainly turn her head, but it was habitually deflected to the left side. While this continued to be the case, at the beginning of February a young man, in a frolic, having taken her head in both hands, turned it hastily towards the opposite side. Immediately the patient felt a sharp pain in the nape of the neck; she was afterwards unable to turn her head to the right side, and deglutition was impeded from that moment. A hard and insensible tumour now began to grow in the posterior cervical region. About the middle of March difficult emission of urine and sleeplessness supervened, and the movements of the left arm and of the fingers of the right hand were enfeebled, as were those of the lower extremities. The difficulty of deglutition often provoked cough; obstinate constipation came on. No acute pain was felt while the head was kept in one position, except occasionally at the back of the neck, where a hard tumour, insensible on pressure, existed in the middle line, opposite to the articulation of the two first cervical vertebræ. The slightest motion of the head were, however, very painful, and much dreaded by the patient, who sank in the course of increasing paralysis.

At the necropsy the odontoid ligament was found broken and disintegrated, though without any signs of suppuration. The odontoid process was not organically injured any more than any other part of the axis or the atlas; it was found to have compressed

and caused excessive softening of the anterior fasiculi of the spinal cord, while the posterior columns displayed little alteration. It should be particularly noticed, in corroboration of the views of Sir C. Bell, &c., that the phenomena exhibited during life in this case, were in perfect accordance with those which would be *a priori* deducible from the post-mortem appearances, agreeably with the doctrines of that physiologist,—*the power of motion had been much more affected than sensation.—Ibid, from Gazette Medicale.*

TREATMENT OF CEPHALALGIA.

Dr. R. Howard prescribes, with success, for nervous and various other headachs, a mixture of a drachm of acetic acid, an ounce of compound tincture of cardamoms, and four ounces of some convenient vehicle, of which he directs a mouthful to be taken every twenty minutes.—*Lancet.*

UN-UNITED FRACTURE OF THE LEG SUCCESSFULLY TREATED WITH IODINE.

John Lawes, a sailor, of sallow complexion and light hair, aged thirty years, was admitted into the London Hospital, under Mr. Scott, Oct. 8th, with an un-united fracture of the lower fourth of the left tibia and fibula, ligamentous structure merely forming the bond of connection between the upper and lower portions of the two bones. The angle of junction was 130° from before backwards; the heel elevated about an inch beyond the opposite heel; the leg slightly flexed; and the apex of the outer malleolus prominent. The great toe pointed downwards and forwards. On making extension from the foot, the lower part of the leg could be brought more nearly into a line with the upper, owing to the yielding of the elastic medium.

He stated that about two years ago while clinging to the wreck of the Lord William Bentinck, in the East Indies, a large log of wood was brought by the waves into violent collision with the left leg, causing a fracture; that he was immersed up to his middle for ten hours in the water; and that considerable numbness succeeded in the lower extremities and lasted for three or four days after he had been conveyed on shore.

He was placed under the customary treatment for fifteen months, part of which time he spent in the Bombay Infirmary, and the remainder in the Queen's Depôt, from which latter establishment he was discharged as incurable.

He arrived in England about three weeks prior to admission. His constitution had been much enfeebled during the voyage, which circumstance he mainly attributed to his unavoidable inactivity during it.

He was immediately placed on a fracture-bed so constructed that permanent extension could be maintained from the foot (which was made a fixed point) by the weight of the pelvis acting through the medium of the femur on the upper part of the tibia. Generous diet and a tonic course of medicine were exhibited.

On Oct. 28, the extension having produced no material alteration in the affected leg, the tendo Achillis was divided, and a weight suspended by a bandage passed round the leg, immediately above the seat of fracture. Tincture of iodine was locally applied daily for the course of a month, at the end of which time an extensive callus had formed, of considerable firmness. The frequency of its application was now diminished to two or three times during the week, but persisted in for three months longer, when he was taken down from the apparatus and placed in the horizontal posture. The foot had assumed its natural position, the only deformity being a slight bow inwards at the place of union. He remained in the hospital three months longer, and a few days before he left walked a distance of nine miles without inconvenience or difficulty, and with the assistance of a single crutch, the use of which he soon dispensed with.

London Lancet, Sept. 16, 1843.

Some Observations on the Statistics of the Vibrio Humana. (*Trichina Spiralis.*) By Dr. Knox.

In the Spring of 1836 a case occurred in the Practical Rooms, Old Surgeons' Hall, of the occurrence of this very curious entozoon infesting the human muscles. Numerous specimens of the worm and its sac were examined with great care by my brother and by myself, and the attention of the profession here was very generally directed to the case. The memoir was published in the July number of the Edinburgh Medical and Surgical Journal of the same year, viz. 1836. Since then, *one case only* has occurred in my Practical Rooms, viz. in October, 1839, in almost every respect so much resembling the first, that it would be a waste of time to give any details respecting it. Now in the interval more than a hundred persons had been examined anatomically, and with such care as to render it nearly impossible that the presence of the worm could have escaped observation had it really occurred. Again, the comparative rarity of its occurrence in Scotland with what has been stated to be the case in England or in Ireland, induced me to address a note to my anatomical colleagues here, and from them I have very politely received the following answer to my queries.

Dear Sir,—I have not met with an instance of the very curious entozoon (the vibrio humana, or trichina spiralis of Farre) discovered by Messrs. Hilton and Paget, of London, although I have turned my attention to it. The number of bodies which have been dissected in my rooms, and under my superintendence, amounts to one hundred and forty-three.—I am dear sir,

Yours faithfully,
P. D. Handysides.

Feb. 6, 1840.

My Dear Sir,—In answer to your inquiry, I beg to state that I have seen but one subject in the muscles of which the trichina spiralis was developed.—The subject was a female about fifty years of age, and of rather spare habit: the muscles were pale and soft. The trichinæ were very numerous, at once detected with the naked eye, and contained, as usual, in a minute white cyst. I regret now that I did not take notes of all the muscles in which they were contained. I have superintended the dissection of between two and three hundred subjects, and this is the only case in which they were found.

I remain, my dear sir,
Yours sincerely,
Alexander S. Lizars.

Feb. 13, 1840.

In addition to these notes from Drs. Handysides and Lizars, Mr. Mackenzie, who superintends Dr. Monro's Practical Rooms, has had the kindness to make me a lengthened verbal communication on the subject. He assures me that since the publication of my memoir the matter had received from him every attention, and he feels assured, that if any case had occurred in his Practical Rooms it could hardly

have escaped observation; yet no case up to this date (February, 1840,) had ever occurred to him. Mackenzie comes therefore to the same conclusion as I and my other anatomical friends in town here have arrived at, viz. that the occurrence of the vibrio humana is very rare in Scotland, since of about five hundred persons examined anatomically there had occurred but *three cases*. This of course refers more especially to the poorest classes of society. What the average may be in the wealthier classes may, perhaps, be never ascertained.—*Lon. Med. Gaz, Sept.* 1.

Some Account of the Epidemic of Scarlatina, which prevailed in Dublin from 1834 *to* 1842, *inclusive; with Observations.* By HENRY KENNEDY, A. B.

The little work before us contains an account of a severe epidemic visitation of scarlatina, written by a practical man, who describes the symptoms he has himself witnessed, and the effects of remedies which he has enjoyed ample opportunities for putting to the test. The importance of the subject will be readily admitted, when we find, as our author tells us, "that in England, in the year 1840, the deaths from scarlatina alone amounted to 20,000; and supposing the rate of mortality to be the average, which, in a very extended scale, is now found to be about 6 per cent., this would show that in the one year there had been upwards of 330,000 cases—a number which, unless we had figures for it, could scarcely be believed.—The same method of calculating, too, shows that at the present moment there are upwards of 500 cases occurring weekly in London, as may be seen from the pages of the 'Medical Gazette.'"

The symptoms, pathology, and treatment, are detailed in succession, and illustrated by a good selection of cases. One of tne most remarkable symptoms met with in the severer cases was the occurrence of a diffuse cellular inflammation of the external parts of the neck and throat, followed by unhealthy suppuration and sloughing; and in no less than three cases death occurred from hæmorrhage caused by sloughing of the parieties of the internal jugular vein.—Sloughing of the mucous membrane of the throat, however, was very rare as a cause of death.

We will present to our readers a few points which we noted, for our own information, from Mr. Kennedy's observations on the effects of remedies.

Emetics.—A teaspoonful or two of mustard the most serviceable, at the beginning of the attack, to rouse the patient from a state of depression; *nothing allayed obstinate vomiting better;* he gave it also at any period of the disease when there was high fever and incessant restlessness. *Warm bath* frequently useful in allaying irritation when the vital powers admitted of it. *Cold and tepid ablution* almost always beneficial. *Cold affusion* was not much resorted to, but, when confined to the head, was found useful for violent raving and restlessness. *Blood-letting* very seldom admissible; leeches to the throat, or mucous membrane of the nose, occasionally brought great relief to head or throat symptoms; but, on the whole, the type of the epidemic entirely forbad depletion.—*Diluents*, copiously administered, the author believes to be of very essential importance. *Stimulants* required almost constantly; they could, throughout the whole epidemic, be administered with much greater certainty of benefit than in any analogous disease: wine and carbonate of ammonia preferred. *Blisters* dangerous from tendency to slough. *Purgatives* but little required, and only to be given with extreme caution. *Opium* the author "found a most valuable medicine, and one which holds out better prospects of saving life in some of the more serious kinds of scarlatina than any other remedy." He gave it, first, for the relief of great depression, weakness, and sleeplessness, attending typhoid symptoms in adults; secondly, for cases in which head symptoms, raving, and so forth, were prominent, and neither relieved by the appearance of the eruption, nor capable of bearing bleeding; thirdly, in cases of diarrhœa; but here it was almost powerless. For the *sore throat*, a few leeches, warm poultices, but, above all, a strong solution of nitrate of silver brushed over the internal surface. For the *diffuse external inflammation*, poultices and keeping up the strength. He saw no cases of recovery from this in children in which suppuration did not occur.—*Provincial Medical Journal*, Oct. 7, 1843.

TREATMENT OF HEMICRANIA AND TIC DOULOUREUX BY CAUTERIZING THE PALATE.

BY M. DUCROS, OF MARSEILLES.

In the most intense hemicrania, and in the most obstinate *tic douloureux*, whether fronto-facial or temporo-facial, the pain disappears almost instantaneously on the application of ammonia at 26°, to the palatine arch, by means of a [camel's-hair] brush; the brush being allowed to remain on the part till a copious flow of tears has been excited. I have tried this for the last three months in a very great number of cases, and the pain has always ceased. If the pain returns, a fresh application again produces a cessation of the neuralgia.—*Lon. Med. Gaz., from Gazette Médicale.*

CREAM OF TARAXACUM.

Cut the fresh roots of dandelion, freed from any adherent earthy matter, (previously washed and slightly scraped,) into transverse slices. Sprinkle any quantity of these, while moist, slightly with spirit of juniper, and express them in a tincture-press. The cream thus expressed will keep any reasonable time for the purposes of the practitioner in the hottest weather.—The dose, a table-spoonful, or more, twice or thrice a-day, will probably produce two or more diurnal biliary evacuations.

It may be diluted, and put up in the form of draughts, with any of the diuretic waters or infusions, or with a solution of cream of tartar.—*Lon. Lancet.*

LITHOTRITY AND LITHOTOMY IN CHILDREN.

The operation, I may say, in conclusion, is not well adapted to young subjects. The parts in them are excessively irritable, and the stones are, in the majority of cases, excessively hard. The fragments are got rid of with difficulty, and altogether I firmly believe that the operation of lithotomy is much to be preferred for young patients. I venture to express this opinion after having had ample experience. The operation of cutting children for stone, I may add, is unattended, in the hands of an experienced and expert surgeon, with risk of any kind, and, indeed, the mortality is not, or should not be, worth noticing; say one death in some hundreds of cases.—*Clinical Lecture by Mr. Liston. London Lancet.* Oct. 28, 1843.

RAYER has sought in vain for a case where the *kidney* can remove absorbed pus from the body.